Saving Lives in Areas of Conflict or Disaster: Community contributions to TB control in Afghanistan

2009-2012

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Afghanistan TB Epidemiology

- Total population: 24,987,700
- Afghanistan is one of 22 high burden TB countries
- Annual estimated TB burden
  - Incidence: 189/100,000 population
  - Prevalence: 351/100,000 population
- Female : Male ratio of reported cases is 2:1

- Population directly observed treatment, short course (DOTS) coverage: 97%
- Health facility DOTS coverage: 76%

Donors:
- United States Agency for International Development (USAID)
- Global Fund (GF)
- Japan International Cooperation Agency (JICA)
- Canadian International Development Agency (CIDA)
- Italian Cooperation (IC)
Health in Afghanistan

- Maternal mortality ratio: 327/100,000 live births
- Under-five mortality rate: 97/1,000 live births
- Infant mortality rate: 77/1,000 live births
- Total fertility rate: 6.3 (UNICEF)
- Gross natural index per capita, 2010: $970
- Acute malnutrition: 33%
- Chronic malnutrition (stunting): 59%
- Access to health services: 80%

(Afghanistan Mortality Survey, 2010)
TB CARE I’s Response to Gender Bias in TB

- Engaged female health workers in TB care provision
  - Trained 156 female health workers in standard operating procedures (SOPs) for case detection
  - Engaged 4,000 female community health workers (CHWs) in community-based DOTS

- Increased awareness among community and health facility clients

- Improved surveillance (addition of indicators for females)

- Promoted multi-sectoral organization approach to TB
  - Ministry of Women’s Affairs
  - Ministry of Education
National TB Program (NTP) Evolution

- 1932: TB control program established (*Sanatorium in Aliabad Hospital*)
- 1954: NTP established
- 1972: TB treatment protocol developed
- 1979: JICA built new building for National TB Institute
- 1997: DOTS implemented
- 2003: NTP building rebuilt
Need for Community-based (CB) DOTS in Remote and Hard-to-Reach Areas

- Poor access to TB services in resource limited settings
- Higher stigma and discrimination against people with TB
- Females rarely allowed to visits to health facilities (cultural issue)
- Poor TB treatment adherence

A CHW observes a TB patient taking pills.
CB-DOTS Implementation Strategies

- Coordination between NTP, NGOs, and the USAID-funded TB CARE I project
- Implementation of NTP CB-DOTS standard operating procedures
- Implementation of CB-DOTS strategic plan
- Involvement of community health workers in TB care provision
- Conduction of awareness raising events in communities
- Implementation of CB-DOTS by contracting with NGOs
## Contribution of CB-DOTS in TB Suspected Cases Identified in Four Provinces (Afghanistan 2008-2012)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total TB Sputum Smear Positive (SS+) Cases</th>
<th>TB SS+ Cases Notified by CHWs</th>
<th>Percentage of Total SS+ Cases Notified by CHWs</th>
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<td>2008</td>
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**USAID/TB CAP**

- **Project target**
- **Achievement**
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*Percentages calculated based on the Total TB SS+ Cases Notified by CHWs.*

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The table above illustrates the contribution of CB-DOTS in TB suspected cases identified in four provinces of Afghanistan from 2008 to 2012. The data shows a significant increase in the number of TB SS+ cases notified by CHWs over the years, with a notable rise from 0% in 2008 to 36% in 2011. USAID/TB CAP is marked on the graph for the years 2009 to 2012, indicating the project's achievement in increasing the percentage of cases notified by CHWs.
## Contribution of CB-DOTS in Treatment Outcomes in Four Provinces (Afghanistan 2010)

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<tr>
<th>Indicator</th>
<th>CHW treatment outcomes N=853</th>
<th>CHW and health facility treatment outcomes N=3,205</th>
<th>National level treatment outcomes N=12,797</th>
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<tr>
<td>Treatment success rate</td>
<td>833 (98%)</td>
<td>2,909 (90.7%)</td>
<td>11,624 (91%)</td>
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<tr>
<td>Cure rate</td>
<td>822 (96.4%)</td>
<td>2,855 (89%)</td>
<td>11,175 (87%)</td>
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<td>Completion rate</td>
<td>11 (1.2%)</td>
<td>54 (1.7%)</td>
<td>449 (4%)</td>
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<td>Deaths rate</td>
<td>10 (1.1%)</td>
<td>57 (1.8%)</td>
<td>257 (2%)</td>
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<td>Default rate</td>
<td>3 (0.4%)</td>
<td>54 (1.7%)</td>
<td>244 (2%)</td>
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<td>Treatment failure rate</td>
<td>3 (0.4%)</td>
<td>25 (0.8%)</td>
<td>122 (1%)</td>
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<td>Transfer out rate</td>
<td>4 (0.4%)</td>
<td>160 (5%)</td>
<td>550 (4%)</td>
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CB-DOTS Implementation Challenges in Afghanistan

- Poor government funding (1%)
- Poor capacity of frontline staff on TB care
- Ignorance of community in health service delivery
- Poor follow up of CB-DOTS implementation

CHWs training in Baghlan province
CB-DOTS Implementation Challenges (cont.)

- Insecurity
- Addressing TB in children (improving contact investigation)
- Supervision/monitoring of 4,500 health posts
- Poorly educated community health workers
- No-payment for community health workers (volunteers)
Lesson Learnt

- CB-DOTS improved early case detection and treatment adherence
  - Suspected TB cases identified: 34%
  - Sputum smear positive rate: 10%
  - Treatment adherence: 98%

- Involving NGOs in TB care contributed to successful implementation of CB-DOTS
Conclusion

■ CB-DOTS proved to be effective in improving early TB case detection and TB treatment adherence in remote and resource limited settings in Afghanistan.

■ This approach could be duplicated in other remote and resource-limited settings and post-conflict areas
Thank you

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